



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,485	02/27/2002	Gonzalez Parada Adrian		4792
7590	01/11/2005		EXAMINER	
JONATHAN E. GRANT			NGUYEN, CHAU N	
2107 HOUNDS RUN PLACE				PAPER NUMBER
SILVER SPRING, MD 20906				
			2831	

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/083,485	ADRIAN ET AL.	
	Examiner	Art Unit	
	Chau N Nguyen	2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 15 November 2004.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 12-17 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 12-17 and 20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date: _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 12, 15, 17 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 12, 15, 17 and 20 contains some vague and indefinite recitations.

Examiner has prepared an examiner's amendment and tried to contact the undersigned attorney to correct the problems and pass the case for allowance. However, there has been no response from the undersigned attorney.

Following are the proposed amended claims from the examiner.

--Claim 12 (currently amended) A flexible superconducting core for a superconducting power cable, said core comprising:

a) a helical central corrugated flexible tubular element made of stainless steel;

- b) a stainless steel core mesh positioned around [a] said helical central corrugated flexible tubular element to provide a relatively flat surface, said mesh consisting of:
- i) a first layer of steel tape of one size; and
 - ii) a second layer of steel tape having a different [said] size from said [first layer of said steel tape] one size, said second layer being positioned over said first layer;
- c) a layer of at least one copper tape [,] positioned on top of said second layer of said [steel tape] core mesh;
- d) a plurality of superconducting tapes layered over said at least one [said] copper tape, forming a first group of a plurality of superconducting tape layers;
- e) a second group of a plurality of superconducting tape layers, at least one [said] layer of said second group positioned on top of said first group of plurality of superconducting tape[s] layers and being wound in one direction opposite to that of (d); and

wherein [a] pitch of [all] the layers varies from a maximum P_{max1} and P_{max2} [medium] in intermediate layers to minimum P_{min1} and P_{min2} in inner and outer layers [layers], while twist angles of the tapes in the layers vary from α_{max1} [(45 degrees)] to α_{min1} [(0 degrees)] and from [α_{max1}] α_{max2} to α_{min2} and at least one layer

Art Unit: 2831

of tapes from normally conducting metal is located between the outer surface of the former and the inner surface of said layer,

wherein:

a) for the inner layers:

i) $P_{\min 1}$ and $\alpha_{\max 1}$ is defined as minimum pitch and maximum twist angle of said tapes in the first layers made of superconducting tapes from the cable axis;

ii) $P_{\max 1}$ and $\alpha_{\min 1}$ is defined as maximum pitch and minimum twist angle of said tapes in the last layers [from the cable axis layer] made of superconducting tapes of the [part] first group of layers adjacent to the [former] central core and having one direction of lay; and

b) for the outer layers;

i) $P_{\min 2}$ and $\alpha_{\max 2}$ is defined as minimum pitch and maximum twist angle of tapes in the first layers made of superconducting tapes from the cable axis; and

ii) $P_{\max 2}$ and $\alpha_{\min 2}$ is defined as maximum pitch and minimum twist angle of tapes in the [first] last layers [from the cable axis layer] made of superconducting tapes of the second [part] group of layers with opposite direction of lay.--

Claim 15, line 2, change "1" to --12--.

Claim 15, lines 2-3, change "first layer of copper tapes" to --at least one copper tape--.

Claim 17, line 2, change "1" to --12--.

Claim 20, line 1, before "superconducting" insert --flexible--.

Claim 20, line 2, change "1" to --12--.

Claim 20, lines 2-3, change "elements of the flexible conductor core to be used may" to --tapes can--.

Allowable Subject Matter

3. Claim 12 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.
4. Claims 13-17 and 20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments with respect to claims 12-17 and 20 have been considered but are moot in view of the new ground(s) of rejection.

Summary

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N Nguyen whose telephone number is 571-272-1980. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Chau N Nguyen
Primary Examiner
Art Unit 2831